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Adapting Forces to a New Era: Ten Transforming Concepts

by Hans Binnendijk and Richard L. Kugler

Overview

A key Department of Defense goal is to build highly capable forces whose mastery of high-tech warfighting will allow decisive victories against new threats and well-armed opponents in future operations. A set of new operational concepts, many of which have surfaced in the ongoing defense strategy review, may facilitate this goal. They focus on rapid and decisive operations in distant theaters rather than on homeland defense. As generic concepts for future warfighting, they offer valuable insights on combat capabilities that should be acquired. Before these principles can be adopted, they must be scrutinized on their individual merits and integrated to provide balanced guidance to force development.

New operational concepts must be embedded in a sensible transformation strategy that should be carried out in measured, purposeful ways. The strategy should focus on the mid term, during which new threats may appear but entirely new forces will not be able to be built. The standard of preparing for two regional wars should be replaced with one that focuses on capabilities for the widening spectrum of conflict and operations in new geographic locations. A three-theater standard should be adopted that readies forces to wage one big war in any single theater while also having sufficient assets for medium-sized strike missions and traditional operations elsewhere. Transformation should strive to create adaptable forces that can handle shifting challenges, unfamiliar missions, and periodic strategic surprises.

It should produce a future posture dominated by improved legacy forces but including some ultra-high-tech forces for special missions. If new operational concepts are capable of producing such forces and capabilities, they may deserve serious consideration.

Ten new operational concepts have emerged as candidates for inclusion in transformation and *Joint Vision 2020*. These concepts focus on building better forces for multiple purposes and employing these forces in specific ways. If the concepts are adopted, creating combat and support forces for them will require programmatic measures. Many of the concepts can be pursued by reorganizing existing forces, continuing normal modernization, or acquiring new information systems and smart munitions. Nonetheless, they will require some budget increases plus a resource strategy that responds to fiscal constraints. Investing wisely in a full set of new concepts will produce stronger forces than focusing on a few concepts in ways that deprive others of funds. The *combination* of new concepts, not any of them individually, offers promise for the future. Moreover, these concepts, which focus on creating high-tech strike forces, must be accompanied by capabilities for low-intensity conflict and by investments in such often-overlooked areas as logistic support, bases and infrastructure, maintenance, and war reserves.

Pursuing Change and Transformation

Senior Department of Defense (DOD) officials have publicly stated that creating improved force capabilities for new operational

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concepts is a key goal of transformation. But what new concepts should be embraced? How are they to work together to create operationally capable forces for the future? This paper identifies potential candidates that might help answer these questions. The term *operational concept* is used in a similar manner to its use in *Joint Vision 2020 (JV2020)*. An operational concept can be defined as an idea or construct to help determine how U.S. forces are employed for warfighting, as opposed to using them for such broader political-strategic purposes as reassuring allies and dissuading adversaries. An integrated family of such concepts can provide guidance for building improved forces with desired characteristics and for using them in combat missions to carry out commander-in-chief campaign plans in the conflicts ahead.

JV2020 puts forth a set of operational concepts, general and specific, for this purpose. While they remain valid, the recent DOD defense strategy review and other writings have generated a new set of 10 candidates for inclusion not only in *JV2020* but also in the Defense Planning Guidance, service plans, operations, and military support, and other documents.

This paper examines them individually and as a whole. Along with identifying these concepts, it endeavors to portray their main features, to briefly evaluate possible roles in transformation, and to suggest strengths and weaknesses. This paper does not provide the in-depth treatment needed to make decisions about these concepts.

But it does call for them to be studied carefully because they may have an important impact on the course of transformation.

In previous writings about the implications of change and transformation, the authors analyzed how DOD can broaden the two-major theater war (two-MTW) standard and addressed how it can manage change by pursuing a balanced combination of capability, adaptability, and transformation. This paper can best begin by briefly recapitulating the three main arguments of these earlier papers, for they offer a strategic framework for assessing new operational concepts.

■ DOD should pursue transformation neither slowly nor impulsively, but in a purposeful and measured way. It should focus on the mid term, when new threats may appear but entirely new forces will not be able to be built. A mid-term focus helps bridge the critical gap between near-term plans to maintain high readiness and long-term efforts to create new platforms and forces as exotic technologies become available.

■ DOD should adopt a three-theater standard that prepares forces and capabilities for one large regional war in a variety of places while maintaining one medium-sized cluster for high-tech strike missions and another for infantry combat, peace enforcement, and similar traditional missions.

■ DOD should strive to build adaptable forces. Instead of focusing on a few fixed plans, it should create forces that can handle a widening spectrum of contingencies in new geographic locations. Such forces should have the modularity to combine in different ways, allowing them to adjust to changes in strategic conditions.

Enacting transformation carefully and deliberately is more logical than either crawling slowly ahead while clinging to the status quo or prematurely pursuing technologies whose time has not yet come. Such a transformation should focus on the mid term of 5 to 15 years because newly emerging threats and dangers could take shape then in ways that existing U.S. military forces might not be able to handle. Improved operational capabilities will be needed, but exotic new technologies will not yet be fully available. A mid-term focus calls for DOD to pursue transformation in ways that blend continuity and change. It helps empower near-term improvements with more farsighted vision, and it helps set the stage for determining how long-term transformation can best take shape. By acquiring such new fighter aircraft as the F-22, the Joint Strike Fighter (JSF), and the

F/A-18 E/F, for example, U.S. forces gain the experience with emerging weapons that will better enable them to judge requirements for the following generation of technologies.

A mid-term focus adds weight to the case for moving beyond the two-MTW standard. This standard served well over the past decade, but the future seems

destined to present both different wars in unfamiliar places and better-armed threats than those mounted by medium-sized rogue states in the 1990s. The purpose of a new standard is not to reduce U.S. forces but to make better use of existing forces. Above all, U.S. forces cannot be so rigidly committed to two improbable wars that they are unavailable for other conflicts that could erupt in many places (for example, along the unstable Southern Belt that stretches from southeastern Europe, through the greater Middle East/Persian Gulf, and along the Asia littoral). A new standard that prepares for a single big war in a variety of places and provides two medium-sized force packages—one high tech, the other traditional—will better prepare U.S. forces for the wide spectrum of crises ahead without losing a capability for waging two MTWs if necessary.

Building adaptable forces is a logical accompaniment to broadening defense plans beyond the two-MTW standard. The idea is not new: *JV2020* explicitly endorses a focus on flexible, agile forces for the future. U.S. combat forces already possess substantial adaptability as a result of their diversity and multiple capabilities. But adequate adaptability in the future should not be taken for granted. The coming era may require the Armed Forces to handle numerous surprises and to carry out complex operations with a variety of force packages. Operational plans and service programs must be carefully prepared to ensure that the combat forces can be swiftly combined to generate new, responsive joint packages capable of handling each crisis. Equally important, mobility forces and logistic support forces must also be prepared with adaptability, modularity, and innovative responses in mind.

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A mid-term focus on adaptability likely will produce a future posture that combines legacy forces and ultra-high-tech forces. For example, legacy forces might characterize 80 to 90 percent of the posture. But owing to transformation, they will be restructured and equipped with new information systems and weapons now emerging from the research and development pipeline. Ultra-high-tech forces, equipped with new platforms and exotic systems, might comprise only 10 to 20 percent of the posture, but they will provide invaluable niche capabilities for especially important, demanding missions. Some proponents judge that in the future posture, ultra-high-tech forces might provide the tip of the spear and improved legacy forces furnish multiple powerful shafts. If this metaphor illuminates the future, U.S. defense strategy and forces will be endowed to deal with strategic challenges in the early 21st century.

New Operational Concepts

If a purposeful transformation is to succeed in changing U.S. forces wisely, it must be guided by sound operational concepts. The term *operational concept* here means a construct for guiding how U.S. forces should be prepared, deployed, and employed for combat missions and warfighting. Normally, a single concept covers one domain of operations. An integrated family of concepts must therefore be created to craft a composite strategic theory of force operations covering all services and missions. If defense transformation remains anchored in old concepts, it risks perpetuating the status quo even if it alters forces and weapons. But if transformation is guided by concepts that grapple with the coming era, it acquires greater promise of producing meaningful changes. Designing and installing new concepts entail risks, but the adoption of good concepts can unlock the door to continued U.S. military superiority.

The critical role of operational concepts can be illuminated by briefly recalling past transformations. The nuclear transformation of the 1950s was driven by a single design that proved short-sighted when nuclear war went out of fashion and conventional war made a comeback in the 1960s. By contrast, the successful transformation of the late 1970s and 1980s was not single-minded. Its scattered nature often suggested a lack of central control, internal consensus, and clear destinations. But at its core, it was guided by a few key operational concepts that grasped the future.

■ *Power projection and rapid reinforcement* called for a better capacity to deploy U.S. forces swiftly to Europe, Asia, and the Persian Gulf.

■ *Maritime supremacy* called for the Navy to switch from defensive missions to offensive operations aimed at sweeping the seas of enemy blue-water navies.

■ *Expeditionary operations* encouraged the Marine Corps to evolve beyond amphibious assault to become a more flexible, multi-purpose force.

■ *Multimission air operations* led the Air Force to move beyond air defense to pursue interdiction, close air support, and other contributions to the land battle.

■ *Operational art* led the Army to move away from linear defense toward mobile reserves, maneuver, and powerful counterattacks. Air-land

battle, in turn, provided a concept for coordinating ground and air missions in attacking enemy forces.

JV2020 currently provides the main intellectual leadership for defense planning. Focused on joint operations for full-spectrum dominance, its core strategic concepts call for decisive force, power projection, overseas presence, and strategic agility. Employing this strategic architecture, the key operational concepts of *JV2020* include information superiority, dominant maneuver, precision engagement, full-dimension protection, and focused logistics. Within the armed services, the concepts of rapid decisive operations and effects-based operations have also gained favor. While *JV2020* remains valid, recent defense reviews and other assessments have produced 10 new operational concepts that are potential candidates for inclusion. Each of them is significant individually, but seen collectively, their importance grows. To the extent they withstand close scrutiny, they offer potent ideas for guiding transformation in new directions that could produce large strategic benefits.

Virtually all of these concepts focus on keeping U.S. forces superior to future adversaries; most do so through acquiring new technologies and systems. They are anchored in the judgment that future adversary forces will be stronger than they are now, will have access to information-era systems, and will employ asymmetric strategies to help foil U.S. operations.

In particular, these concepts assume that enemy forces will launch swiftly unfolding strikes to win quickly before U.S. forces can converge on the scene. As a result, these concepts call upon U.S. forces to deploy swiftly and to win quickly and decisively, with minimum U.S. and allied casualties. They thus seek to dominate future wars by controlling them, defeating enemy forces operationally and destroying them, occupying key territory, and producing favorable political outcomes.

The new operational concepts fall into two categories, each of which has five members. The first category provides concepts primarily for building transformed forces through new technologies and reengineering of structures. Because of their general characteristics, such forces could be employed in combat in different ways depending upon commander-in-chief needs. The second category provides guidance on more specific ways to employ these forces in crises and wars. These 10 concepts are:

- joint response strike forces for early entry operations
- enhanced information systems and space-based assets for force networking
- accelerated deployment of theater missile defenses for force protection
- realigned overseas presence and better strategic mobility for swift power projection
- interoperable allied forces for multilateral operations
- maritime littoral operations for projecting power ashore
- standoff targeting and forcible entry for antiaccess/area denial threats
- enhanced tactical deep strikes for joint air operations

- decisive close combat operations and deep maneuver for ground forces
- deliberate and sustained operations.

Joint response strike forces for early entry operations. This concept is anchored by the premise that U.S. forces must become better at deploying to a crisis during its critical initial days and weeks. It calls for configuring a portion of the military posture for rapid deployment as well as the demanding set of defensive and offensive operations that take place in the early stages, often in the face of enemy surprise attacks aimed at winning before U.S. reinforcements arrive. The resulting strike forces would be highly capable of counterterrorist operations as well as a wide spectrum of other missions, including against well-armed opponents. Some proponents argue that this concept could result in the creation of standing joint task forces in the major theater commands and the continental United States (CONUS), charged with deploying rapidly and fighting aggressively. Regardless of command arrangements, this concept calls for joint forces configured for early entry that are capable of halting the attack, seizing the initiative by degrading enemy forces, striking such critical targets as weapons of mass destruction (WMD) systems, and securing rear areas for reinforcements. To its proponents, the strength of this concept is that it could focus defense planning on tip-of-the-spear forces. However, it could result in insufficient attention to follow-on reinforcements that also could be critical to winning.

Because forces must begin arriving within 2 to 4 days of a decision to deploy and must complete deployment within 30 days, they must be highly ready, capable of moving rapidly, and unencumbered by ponderous logistics. Limited in size and often outnumbered, these forces must be equipped with advanced information systems, modernized weapons, and ultra-tech systems that provide high lethality, survivability, and tactical flexibility. Air forces would require stealthy interceptors and fighter bombers, supported by airborne warning and control systems and joint surveillance and target radar attack systems (JSTARS), and ample stocks of ultra-smart munitions. For example, 3 to 6 fighter wing equivalents, backed by strategic bombers, could be needed. Naval forces must have potent littoral capabilities for initially defending zones of joint operations, supporting troop movements ashore, and bombarding enemy forces from long distances. A carrier battle group, an amphibious ready group, and other specialized combatants normally will be needed. Ground forces must be capable of protecting airbases and seaports, conducting active reconnaissance of enemy forces, and engaging in blocking actions and limited meeting engagements when necessary. Other units that probably will be necessary are light mechanized forces—light enough to deploy swiftly but strong enough for intense combat—or lean armored units, coupled with air assault and deep fire assets (at least a division and preferably a corps).

Enhanced information systems and space-based assets for force networking. While information operations are a staple of JV2020, this concept calls for accelerated efforts to develop new, high-tech systems that could further enhance combat operations. Its ultimate goal is to fully network all joint forces so they can work together in conducting high-speed, simultaneous, and decisive operations. This network would bring all forces—across all services and missions, from top to bottom of the command structure—into close contact in ways providing high coordination even if the forces themselves are widely distributed. The concept calls for a network of interlocking information grids that provide dominant battlespace awareness: an intelligence grid, a communications grid, an engagement grid, and a logistic support grid. It also requires strong information warfare assets: the capacity to defend U.S. networks against enemy attacks and to degrade enemy networks.

This concept also envisions greater use of space-based assets. Modernized satellites for communications, navigation, and intelligence surveillance will be needed, with systems capable of operating in all weather conditions and linked directly to the deployed forces. Also envisioned is a global satellite system that provides near-real-time targeting data: a JSTARS in space.

In the short term, weapons in space likely will be limited to missile defense systems, but in the distant future, other strike assets and transport systems might be deployed there. Greater reliance on space will necessitate defensive systems for protecting against enemy interference, coupled with capabilities to degrade enemy use of space. The overall strength of this concept is its

capacity to move U.S. forces more boldly into the information age with technologies that enemies will be hard pressed to match any time soon. But preoccupation with information systems and space should not come at the expense of neglecting combat forces and weapons. Seeing the battlefield better than the enemy sees it does not itself guarantee victory.

Accelerated deployment of theater missile defenses for force protection. The recent effort to accelerate deployment of theater missile defenses is a major departure in U.S. defense strategy and an important part of transformation. Currently, public attention is focused on national missile defenses (NMD) and other homeland defense measures. The deployment of theater air and missile defenses (TAMD), nonetheless, may be more important for facilitating overseas military operations. Whereas NMD will protect U.S. territory, TAMD will protect U.S. forces in war zones from attack by theater ballistic missiles and cruise missiles armed with WMD or conventional warheads. TAMD also will help protect allied countries and their forces. Several systems are presently being developed. Lower-tier systems that provide defense against short-range missiles include the Patriot Advanced Capability-3 and the Navy Area Defense System. Upper-tier systems defend large areas against medium- and intermediate-range missiles; included are theater high altitude area defense, the Navy Theater Wide system, and airborne lasers.

Decisions have not yet been made on the exact mix of systems, but deployment likely will unfold faster for TAMD than for NMD. The combination of NMD and TAMD defenses will enhance the safe operation of U.S. forces in an era of accelerating WMD proliferation. The risks are threefold: missile defenses will not be foolproof even against limited threats, they will complicate political relations with allies and other countries, and costly options could result in funding shortfalls for other combat forces. A consideration for future force operations is that missile defense deployments will not take place in a strategic vacuum. During the Cold War, U.S. strategy relied on several key concepts to integrate its use of conventional and nuclear forces: extended deterrence, forward defense, flexible response, graduated escalation, and massive retaliation. Over the past decade, conventional wars have been waged outside the old shadow of nuclear escalation.

In the future, conventional wars likely will be waged against enemies possessing WMD systems. A new set of integrated concepts for determining how to handle escalation will be needed, but unlike the Cold War, missile defenses will factor into the equation.

Realigned overseas presence and better strategic mobility for swift power projection. This concept calls for switching overseas presence away from lingering Cold War missions toward the new missions and strategic geography of the future. The U.S. presence in Europe (currently 100,000 troops) would be refocused from defending NATO borders toward becoming a hub for power projection into distant areas, not only on Europe's periphery but also in the greater Middle East and Persian Gulf. It also would use a reengineered U.S. presence to help guide allied forces into their own transformation. As the Korean threat fades, this concept also would launch similar departures in the Asian posture of nearly 100,000 troops, focusing on new power-projection missions along the Asian littoral and in South Asia. The result might be fewer troops in Europe and more in Asia. More important, however, the forces would be reengineered for swift deployments to distant areas, and they would be equipped with information-era structures and assets for new missions, which often will be mobile and littoral, not stationary and continental. Along with these changes to forces would come efforts to develop better access to bases, facilities, and infrastructure along the endangered Southern Belt.

This concept also calls for stronger strategic mobility assets to speed deployment of CONUS-stationed forces and logistic support assets to crisis zones. It would invest in more prepositioning of equipment and stocks afloat and ashore, bigger and faster transport ships, improvements to existing heavy air transports, better offshore logistic support, and faster offloading abroad in places where access to big ports and airfields is limited. As new technology becomes available, super-heavy air transports and ships might also be acquired. Overall, the *combination* of a realigned overseas presence and better mobility for swift power projection offers promise in the mid term, and this concept can be carried out mostly with existing or

emerging technologies. But altering overseas presence can alarm countries losing U.S. forces and those gaining them, and while modest increases to strategic mobility forces are affordable, major improvements could be expensive.

Interoperable allied forces for multilateral operations. This concept recognizes that most U.S. combat operations will be multilateral, often involving major participation by allies and partners. Accordingly, it calls for efforts to reengineer and improve allied forces so they can operate with U.S. forces that are undergoing transformation. The need for allied information systems and networks that can interoperate with U.S. networks is emphasized. In the coming era, interoperability will come mostly from establishing connectivity between U.S. and allied information nets rather than from equipping troops with identical weapons and munitions. This concept also envisions allied improvements to provide better expeditionary forces, power projection assets, long-distance logistic support, modern weapons, and smart munitions. It aims not for mirror images of U.S. forces, but instead for allied forces that can participate as team players, often carrying out niche missions of their own.

In Europe, this concept envisions a follow-on to the NATO Defense Capability Initiative to configure modern allied forces for new expeditionary and projection missions. Such a plan could be integrated with European Union efforts to create its own multilateral forces. In the Persian Gulf, the concept takes advantage of improving Saudi and Kuwaiti forces and those of other friendly countries to provide better niche assets in such critical areas as initial defense, suppression of enemy antiaccess efforts, and support of U.S. reinforcements. In Asia, it envisions the forces of Japan, South Korea, Australia, and other countries gradually becoming better at power projection, new missions, and interoperability with U.S. forces. Overall, the idea of better, interoperable allied and partner forces not only makes strategic sense but also is vitally necessary if future U.S. military strategy is to succeed and burdens are to be shared fairly. But this concept faces political constraints. Convincing these countries to respond with bigger defense budgets and improved forces is easier said than done. Even when allied and partner forces are militarily capable, multilateral combat operations can be difficult to carry out. When allied forces fall short in their missions, U.S. forces must pick up the slack or risk damaging battlefield setbacks.

Maritime littoral operations for projecting power ashore. Since the Cold War ended and the Soviet naval threat disappeared, the U.S. Navy has increasingly focused on littoral operations as a key *raison d'être*. In the past decade, the Navy has played important littoral roles in conducting Operation *Desert Storm* and actions in Kosovo, peacekeeping in the Balkans, enforcing no-fly zones in the Persian Gulf, and helping guard against aggression by Iraq and North Korea. Such missions will continue, but the maritime littoral operations envisioned by this concept are different and more demanding than those of the recent past. These operations increasingly will focus not only on controlling littoral waters but also on using the littoral to project naval and marine power ashore in support of joint

campaigns. In the coming years, these naval missions may be conducted against enemies that likely will possess missiles, mines, and submarines capable of threatening U.S. ships. In addition, naval forces, supported by joint assets, will be operating along the vast littoral from Southwest Asia to Northeast Asia for the strategic purposes of reassuring allies and friends, protecting critical sealanes and commerce zones, dissuading China from excess geopolitical ambitions, and carrying out counterterrorist missions.

The combination of heightened threats and Asian littoral missions has spawned debate over the Navy's future. One issue is the size of the Navy: whether its current number of ships (310) should stay level, grow, or decline as a result of slow shipbuilding. Another issue is the nature of future ships: whether big carriers and traditional combatants should dominate, or if the Navy should procure such platforms as smaller carriers, Streetfighter and other small littoral ships, the DD-21 destroyer for projecting power ashore, big surface ships and submarines with many cruise missiles, and mobile offshore platforms. A third issue is political: determining how to employ Asian littoral operations in a manner that advances U.S. interests and regional stability, rather than inflaming an already tense situation. Resolving these issues wisely will be key not only to charting the course of the Navy but also to carrying out U.S. defense strategy and foreign policy in an era of accelerating globalization.

Standoff targeting and forcible entry for antiaccess/area denial threats. This operational concept is focused on overpowering antiaccess/area denial threats so that U.S. forces can gain decisive entry into hot crisis zones. Its two components are intended to work together on behalf of the same strategic purpose. Whereas standoff targeting helps suppress enemy defenses, forcible entry operations complete the job and establish U.S. forces at forward locations in the crisis zone.

Standoff targeting involves using strategic bombers, cruise missiles, and future exotic systems to bombard enemy targets from long distances in wartime. Using strategic bombers to support theater campaigns is hardly new: the United States employed B-52s in Vietnam and made significant use of bombers and cruise missiles in *Desert Storm* and Kosovo. The idea has gained added prominence recently for two reasons. Some analysts fear that in future conflicts, U.S. forces either will lack access to forward bases and infrastructure or will be unable to operate safely against enemy antiaccess/area denial threats. In addition, the existing force of nearly 200 bombers and ships with cruise missiles can generate up to one-quarter of the military air-delivered firepower. The growing accuracy of smart munitions is giving them the capacity to carry out lethal bombardment campaigns independently from rear bases and outside enemy threat envelopes. A key effect can be to help suppress enemy defenses, thereby allowing other U.S. forces to converge. The time has arrived to make full use of these increasingly effective assets in U.S. plans for future theater war.

Standoff targeting clearly has a contributing role to play in future defense strategy. At issue is whether it should be supplementary to traditional forward-deployed forces or instead central in ways

that replace these forces. Arguments against relying too heavily on this concept are severalfold. Abandoning forward commitments in favor of rearward stationing could unnerve allies and friends that rely on U.S. security guarantees, while signaling adversaries that the United States is losing the willpower to resist them. Some analysts dispute the notion that forward bases will regularly be lacking, and they assert that future enemy threats can be readily overcome by counteractions. Relying heavily on standoff targeting could necessitate a big increase in associated forces, perhaps necessitating more B-2 bombers and cruise missile ships in numbers that divert major funds from other combat forces.

Forcible entry asserts that U.S. military strategy should remain anchored in forward operations but acknowledges that future antiaccess/area denial threats will necessitate a concerted effort to become better at directly inserting combat forces in the face of concerted

opposition. Supporting this concept is historical legacy. U.S. forces have been operating successfully against such threats since World War II. The threat posed by Soviet forces during the Cold War was considerably more potent than that likely to be mounted by future rivals any time soon. Nonetheless, the combination of

enemy ballistic missiles and cruise missiles, submarines and mines, and WMD systems means that future crisis interventions in the Persian Gulf and Asia will be more difficult than those of the past decade, when little opposition to U.S. deployments was encountered.

Forcible entry will require a joint, coordinated effort by all services. The challenge will be to improve the forces in ways that are effective, balanced, and affordable. Better standoff targeting and other strike assets will be needed to help suppress enemy defenses. The Navy will require better networked defenses against cruise missiles, ballistic missiles, and other threats. The Air Force and Army will need to become proficient at swiftly deploying stealthy air interceptors and enhanced Patriot batteries. The Army and Marines will need to be able to deploy light, dispersible forces in the early stages. Airfields, ports, and other infrastructure will require hardening. Improved capabilities will be needed for offshore logistics and force projection into unprepared areas. Often lost in the clamor for expensive programs in this arena is recognition that better allied forces potentially can carry much of the early defense load, thereby easing the forcible entry challenge for U.S. forces.

Enhanced tactical deep strikes for joint air operations. This concept aims at upgrading the capacity of forward-committed U.S. forces to conduct lethal air bombardment of enemy formations in their rear areas, behind the front lines. While strategic bombers and cruise missiles can help, a deep strike campaign will be carried out primarily by tactical air forces, multiple launch rocket systems with Army tactical missile systems, attack helicopters, and long-range artillery. Major progress has been made recently in strengthening the Armed Forces in this arena, but further gains are possible. JSTARS and navigational satellites permit near-real-time targeting, including against mobile ground forces. Such munitions as joint air-to-surface standoff missiles, joint direct attack munitions, joint standoff

weapons, sensor-fused weapons/Skeet, and brilliant antiarmor submunitions permit highly accurate, lethal strikes against a wide spectrum of targets, including armored vehicles. The F-22, JSF, and F/A-18 E/F provide stealthy aircraft for suppressing enemy air defenses and carrying out major bombardment using the full spectrum of modern munitions. As unmanned aerial vehicles and unmanned combat aerial vehicles mature, they will be useful complements to these combat aircraft.

As these systems are acquired, deep strike campaigns will become an increasingly important part of operational strategy for keeping enemy forces at bay, destroying them rapidly, and winning wars decisively. Effects-based targeting can help determine optimal ways for allocating strikes against enemy forces, infrastructure, and industry, thereby further enhancing the effectiveness of deep strikes. Although deep strikes normally can help defeat enemy forces, they cannot win wars on their own. Strong ground combat forces also will be needed, especially if the weather is bad, terrain is difficult, the enemy must be overpowered in a few days, or territory must be occupied. For deep strike campaigns to succeed, smart munitions must be available in adequate quantities, and air forces must have the support assets and spares needed to generate high sortie rates. Because shortfalls already exist, buying sufficient stocks of smart munitions is a critical priority. Modernization with new combat aircraft is important, but the high cost of buying several thousand new models will necessitate a resource strategy of phased procurements to ensure affordability.

Decisive close combat operations and deep maneuver for ground forces. This concept focuses on ways to strengthen Army and Marine forces for close combat and deep counter-thrusts so that they can maintain superiority over enemy forces in situations where crushing, fast-paced ground campaigns are needed, accompanied perhaps by war-termination efforts that occupy enemy territory. Currently, active Army forces provide four light divisions (infantry, airborne, and air assault) and six heavy divisions (armored and mechanized). In its interim force plan, the Army intends to reconfigure six brigades with light armored vehicles so they can deploy rapidly, including aboard tactical air transports. In pursuing its objective force over the long term, the Army plans to create new fighting vehicles that will replace heavy tanks and artillery tubes with lighter weapons that have comparable firepower and survivability. This vision depends heavily on major progress in exploratory research and development programs that will take years to develop, and even then it probably will have serious trouble creating new ground weapons that are light but survivable, powerful, and embedded in protective systems. Until then, the Army may be well served by anchoring its plans on interim forces, keeping its tanks and other weapons, and making better use of prepositioning to deploy faster than it does now. Heavy forces with prepositioned equipment often can deploy faster than light forces (with no prepositioning) from CONUS.

Some critics argue that the present focus on technology should be accompanied by continuing efforts to reorganize and reengineer Army force structures. Progress in this area could help reduce multiple Army command layers and large logistic support assets while

creating new combat formations for swift maneuvers and decisive strikes in joint operations. The Army and Marines are not pursuing near-term modernization with full suites of new weapons, but they are pursuing some new systems—for example, the Comanche helicopter, the Crusader artillery tube, the V-22 Osprey, and upgraded tanks and infantry fighting vehicles. Progress in these programs will be needed as part of any effort to pursue this operational concept.

Deliberate and sustained operations. The previous nine concepts assume that U.S. forces will swiftly deploy to a crisis and then launch aggressive operations aimed at rapidly overpowering the enemy and attaining decisive victory within a few days or weeks.

Afterward, U.S. forces presumably would withdraw from the scene as soon as possible. Such short, explosive, high-tech wars may characterize most future efforts, but U.S. defense strategists should remember that alternative types of wars may be waged. Some conflicts may be

marked by deliberate operations aimed at controlling a crisis over a lengthy period rather than overwhelming enemy forces immediately. Regardless of whether wars are won quickly or deliberately, a sustained U.S. presence may remain to exert control over the political fallout in the aftermath. This concept calls attention to the need for U.S. forces to remain prepared for these longer duration operations, even as they acquire greater capabilities for winning rapidly and decisively.

Deliberate operations may not be a preferred norm of U.S. military strategy, but they can be necessitated by a host of considerations: crises that build slowly, allies that balk, physical constraints that prevent U.S. forces from deploying quickly, enemies that refuse to be beaten, or wars interspersed with periods of diplomacy. Sustained operations can occur as a result not only of wars dragging on without a conclusion but also of political decisions to occupy the territory of a defeated enemy, perhaps as part of war-termination policies. The current no-fly zones in Iraq are an example of compelled political settlements that require an enduring postwar presence on friendly soil. Peacekeeping, of course, is a hallmark of deliberate sustained operations. Remaining prepared for such operations requires a focus on special combat forces (such as infantry), logistic support units, and war reserve stocks that otherwise might lose favor in a defense strategy focused on winning rapidly and decisively. It also necessitates remaining aware that modern war may not always take the form that U.S. plans, forces, and technology want or expect.

Future Directions and Resource Strategy

Provided these 10 concepts are embedded in a sound overall transformation strategy focused on the mid term for adaptability, they offer plausible candidates for building highly capable forces for new era operations over the coming decade and beyond. Their main thrust is to prepare high-tech forces that can deploy rapidly and strike lethally against well-armed enemies. Their defensive measures will help protect U.S. forces against new era threats, especially

WMD and antiaccess/area denial threats. Their emphasis on building more mobile forces and gaining access to a wider network of bases and facilities, including along the Asian littoral, will help enable U.S. forces to operate in new geographic locations. The effect will be not only to create better technical capabilities but also to enhance adaptability, especially in contingencies at the medium-to-high end of the spectrum.

Nonetheless, these and other new operational concepts must be evaluated carefully to ensure that they make strategic sense, will produce new capabilities required by the Armed Forces, and fit together to provide a coherent approach to warfighting. If they prove to have merit, these 10 operational concepts offer a new strategic vision for building and employing future U.S. forces. In this vision, troops would be strengthened in multiple ways to carry out demanding missions through new era joint operations. They would need appropriate weapons, technologies, and other assets to carry out these new missions and operations. As a result, the transformation process must be accelerated. Yet this vision does not require a frantic leap into the future and uncharted terrain. It can be accomplished through a purposeful and measured transformation focused on the mid term, one that embodies a mixture of continuity and change through a combination of upgraded legacy forces and some ultra-tech forces.

This strategic vision has important global political implications that need to be recognized and handled wisely. Some countries will welcome the idea that the United States is assembling swift, high-tech strike forces backed by theater missile defenses, but the plan already is triggering apprehension in others, allies and adversaries alike. The United States will need to use diplomacy to persuade skeptics that it is behaving responsibly, not like a rogue hyperpower with a unilateral agenda. Embedding U.S. defense preparations in multilateral security ties, interoperability with allied forces, and partnership relations can help reduce this apprehension.

Notwithstanding their many attractive features, these concepts should not be viewed as a cure-all or as offering a stand-alone defense strategy. While they mainly focus on wars at the high end of the spectrum, most do not pay comparable attention to lower end conflicts in which better forces may also be needed. Preoccupation with new technologies for strike operations, if carried too far, might risk overlooking the many other dimensions of warfighting, including well-trained forces that are ready in many ways. These concepts must be accompanied by measures in such traditional, often-overlooked areas as logistic support, bases and infrastructure, prepositioning, maintenance, smart munitions, and war reserves. Otherwise, they could create forces that possess glittering new technologies but lack the overall wherewithal to fight effectively.

To be successful, pursuit of these concepts must be accompanied by a sound resource strategy aimed at affordability and balanced investments. Adequate defense budgets should be attained

through sustained spending increases that permit new ventures. Absent major reductions in other areas, nonetheless, fiscal constraints will be tight for many years, and priorities must be set. All of these concepts require investments in new capabilities, some of which are not highly expensive. They can be carried out adequately with funding support that is consistent with foreseeable budgets. The exceptions are missile defense, space assets, and air modernization, all of which carry big price tags if pursued fully. In these and other costly programs, investment decisions will need to be made with a focus on high-leverage payoffs and cost-effectiveness in mind. Otherwise, spending on a few big-ticket concepts could leave the others starved of funds. If savings must be found, the answer is not necessarily neglecting these concepts or slashing combat forces, which consume only one-third of the DOD budget. Equal or greater savings likely can be found by controlling the spiraling operations and maintenance budget, trimming manpower across DOD, reengineering structures, and crafting an affordable plan for procurement of new tactical combat aircraft.

The appeal of these 10 concepts lies not in their individual features, but in their capacity to work together

to create a composite theory of force preparations and operations. Any effort to pursue only a few concepts, while neglecting others, could produce an imbalanced force incapable of the full-spectrum decisive operations required by future strategic challenges. For example, preoccupation with missile defense, standoff targeting, and littoral maritime operations could result in inadequate forces for direct crisis interventions. Likewise, an emphasis on forcible entry and deep strike, to the exclusion of close combat capabilities, could result in a lack of strong ground forces.

The Armed Forces will be served best by investing wisely in a full set of valid new concepts in affordable, well-planned ways, while attending to the other aspects of defense preparedness. In the final analysis, a strong military posture will be marked by the capacity to perform many missions and operations effectively—rather than a few superbly and others poorly. This is a central lesson of the past decades, during which the United States struggled hard to build its superior forces of today. It likely will prove to be the guiding beacon for building and using transformed forces for the 21st century.

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